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OCT 24 2013

**Public Service Commission of the District of Columbia**

FCC-Competition Policy Division

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**BETTY ANN KANE**  
CHAIRMAN

Received & Inspected

OCT 22 2013

October 17, 2013

FCC Mail Room

Julie A. Veach  
Chief  
Wireline Competition Bureau  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, D.C. 20554

RE: Best Practices on LSR SUPP, Expedites, Due Date Changes and on  
Area Code Relief Options

Dear Ms. Veach:

This is to advise the Federal Communications Commission (FCC) that the North American Numbering Council ("NANC"), at its September 18, 2013 meeting, unanimously concurred with the recommendation of the Local Number Portability Administration (LNPA) Working Group to recommend approval by the FCC of the Best Practice 65 on LSR SUPPs, Expedites, Due Date Changes which will result in changes to the NANC LNP Process Flows. The purpose of the changes is to stop the premature activation of ports by NNSPs prior to the FOC due date agreed to with the ONSPs during the LSR exchange process. This premature activation was adversely affecting service for the end user, as the old service providers involved did not have their networks set to support the port out being done several hours or even days before the agreed upon due date. The service provider who was activating ports prematurely stated they believed the LNP Process Flows contained a loophole permitting premature port activations. The service provider ceased activating ports prematurely and the LNPA Working Group closed the perceived loophole, in order to insure that the end users' service would not be harmed during the port. (See the attached Inter Service Provider LNP Operations Flows – Narratives (Version 4.2.1) - Figure 7, Step 1; Figure 9, Step 3; and Figure 10, Step 4.)

In addition, at this meeting the NANC concurred (with abstentions by South Carolina Public Service Commission Chairman G. O'Neal Hamilton and the COMPTel and NCTA representatives) with the recommendation of the LNPA Working Group to recommend approval by the FCC of the Best Practice 30 on Area Code Relief Options – All Services Overlay, subject to public review and comment. Due to the implementation of number portability, the LNPA Working Group has concluded that the landscape has

changed which makes implementing area code splits more problematic for end users and the industry. (See the attached Best Practice 30 Documentation.)

Please feel free to contact me or the LNPA Working Group Co-Chairs: Paula Jordan Campagnoli, T-Mobile ([paula.jordan@t-mobile.com](mailto:paula.jordan@t-mobile.com)), Linda Peterman, Earthlink ([Linda.Peterman@corp.earthlink.com](mailto:Linda.Peterman@corp.earthlink.com)) or Ron Steen, AT&T ([rs7566@att.com](mailto:rs7566@att.com)), if you or members of your staff have any questions regarding these NANC recommendations.

Finally, at the February 21, 2013 NANC meeting, Henning Schulzrinne, FCC Chief Technology Officer, gave a presentation on the TDM-to-IP numbering related issues. At the September 18, 2013 meeting, the NANC unanimously concurred with a recommend a "Proposed Work Program" (See the attached "NANC Deliverable", prepared by Mary Retka, Century Link, and Rosemary Emmer, Sprint.) to address the numbering related issues addressed in Mr. Schulzrinne's presentation. The NANC requests that the FCC refer the matter of future TDM-to-IP numbering management to the NANC for further consideration and recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read "Betty Ann Kane".

Betty Ann Kane  
Chairman

Attachments (3)

cc: Henning Schulzrinne, FCC  
Ann Stevens, FCC  
Sanford Williams, FCC  
NANC Members

## Inter-Service Provider LNP Operations Flows – Narratives

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**Narratives:** Following are the textual descriptions of the Inter-Service Provider Local Number Portability (LNP) Operations Flows. These Narratives (Version 4.2.1) provide a detailed description of each process step within the attached LNP Operations Flows (Version 4.2).



NANC Flows v4.2 -  
06-30-2012.pdf

### **Legend:**

Local Service Provider (LSP) = Any provider (e.g., voice provider, data provider) that administers and bills local exchange and related services for the End User. The following terms identify LSPs with specific roles during the porting process:

- New Local Service Provider (NLSP) - The local provider of record following the completion of the porting process.
- Old Local Service Provider (OLSP) - The local provider of record prior to the porting process.

Network Service Provider (NSP) = Carrier that provides the facilities and switch/equipment components needed to make up an End User's local telecommunications service. The following terms identify NSPs with specific roles during the porting process:

- New Network Service Provider (NNSP) - The network provider of record following the completion of the porting process.
- Old Network Service Provider (ONSP) - The network provider of record prior to the porting process.

CSR = Customer Service Record  
DSL = Digital Subscriber Loop  
FOC = Firm Order Confirmation  
FRS = Functional Requirements Specification  
ICP = Inter-carrier Communication Process  
IIS = Interoperability Interface Specifications  
LSMS = Local Service Management System  
LSR = Local Service Request  
NPAC = Number Portability Administration Center  
PSTN = Public Switched Telephone Network  
SOA = Service Order Activation  
SP = Service Provider  
SV = Subscription Version  
TN = Telephone Number  
“via the SOA interface” = generic description for one of the following: the SOA CMIP association, LTI, or contacting NPAC personnel  
WPR = Wireless Port Request  
WPRR = Wireless Port Request Response



## Inter-Service Provider LNP Operations Flows – Narratives

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### **NOTE:**

Pursuant to FCC Order 07-188, released on November 8, 2007, and FCC Order 09-41, released on May 13, 2009, Local Number Portability (LNP) obligations are extended to interconnected Voice over Internet Protocol (VoIP) providers. In paragraph 8 of FCC Order 09-41, the FCC ruled the following: “Thus, we require all entities subject to our LNP rules, including interconnected VoIP providers and their numbering partners, to complete port requests for simple wireline-to-wireline and simple intermodal ports within one Business Day, unless a longer period is requested by the new provider or the customer elects otherwise.”

The North American Numbering Council (NANC) identifies three classes of interconnected VoIP providers, defined as follows:

1. Class 1: A standalone interconnected VoIP provider that obtains numbering resources directly from the North American Numbering Plan Administrator (NANPA) and the Pooling Administrator (PA) and connects directly to the Public Switched Telephone Network (PSTN) (i.e., not through a PSTN Service Provider partner’s end office switch). Class 1 standalone interconnected VoIP providers must follow the appropriate Wireline-Wireline/Intermodal Flows (Simple or Non-Simple, whichever is applicable) for the LNP provisioning process, serving as the New Network Service Provider (NNSP) or Old Network Service Provider (ONSP), whichever is applicable.
2. Class 2: An interconnected VoIP provider that partners with a facilities-based Public Switched Telephone Network (PSTN) Service Providers to obtain numbering resources and connectivity to the PSTN via the Service Provider partner’s switch. A Class 2 interconnected VoIP provider is not considered a reseller in the context of the FCC definition of a Simple Port (refer to FCC Order 07-188 and FCC Order 09-41 for Simple Port definition). Class 2 interconnected VoIP providers must follow the appropriate Wireline-Wireline/Intermodal Flows (Simple or Non-Simple, whichever is applicable) for the LNP provisioning process, serving as the New Local Service Provider (NLSP) or Old Local Service Provider (OLSP), whichever is applicable.
3. Class 3: A non-facilities-based reseller of interconnected VoIP services that utilizes the numbering resources and facilities of another interconnected VoIP provider (analogous to the “traditional” PSTN reseller). A Class 3 interconnected VoIP provider is not considered a reseller in the context of the FCC definition of a Simple Port (refer to FCC Order 07-188 and FCC Order 09-41 for Simple Port definition). Class 3 interconnected VoIP providers must follow the appropriate Wireline-Wireline/Intermodal Flows (Simple or Non-Simple, whichever is applicable) for the LNP provisioning process, serving as the New Local Service Provider (NLSP) or Old Local Service Provider (OLSP), whichever is applicable.



## Inter-Service Provider LNP Operations Flows – Narratives

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**NOTE:**

The FCC has allowed that *One Business Day* porting must be implemented either within 9 months of the NANC report to the FCC, or for carriers which qualify, implemented within 15 months (FCC 09-41, para 12). The Local Number Portability Administration Working Group (LNPA WG) provisioning flows and *One Business Day* definition require reciprocal implementation where carriers must only port-in at the interval which that carrier also ports-out.

**NOTE:**

Service Providers are not precluded from exceeding the requirements set forth in the NANC LNP Provisioning Flows. For example, no provider is required to allow activation on a non-Business Day (Saturday, Sunday or Old Service Provider Company-Defined Holiday). However, a non-Business Day activation may be performed as long as **both** Service Providers agree **and** any Service Provider activating a port on a non-Business Day understands the porting out Service Provider may not have, and is not required to have, operational support available on days not defined as Business Days. In agreeing to non-Business Day activations, the Old (porting out) Service Provider may require that the Local Service Request (LSR)/Firm Order Confirmation (FOC) and the New (porting in) Service Provider NPAC Create message be due-dated for the appropriate normal Business Day in order to ensure that the End User's service is maintained.

## Inter-Service Provider LNP Operations Flows – Narratives

### Port Type Determination

Figure 1

<b>Flow Step</b>	<b>Description</b>
1. START: End User Contact with NLSP	<ul style="list-style-type: none"><li>• The process begins with an End User requesting service from the NLSP.</li><li>• It is assumed that prior to entering the provisioning process the involved NPA/NXX was opened for porting (If code is not open, refer to Inter-Service Provider LNP Operations Flows – Code Opening Process, Figure 16.).</li></ul>
2. End User agrees to change to NLSP	<ul style="list-style-type: none"><li>• End User agrees to change to NLSP and requests retention of current telephone number (TN).</li></ul>
3. NLSP obtains End User authorization	<ul style="list-style-type: none"><li>• NLSP obtains verifiable authority (e.g., Letter of Authorization – [LOA], third-party verification – [TPV], etc.) from End User to act as the official agent on behalf of the End User. The OLSP cannot require a physical copy of the End User authorization to be provided before processing the Customer Service Request (CSR) or the port request. The NLSP is responsible for demonstrating verifiable authority in the case of a dispute.</li></ul>
4. Is this a Wireless-Wireless Port?	<ul style="list-style-type: none"><li>• If Yes, go to Step 5.</li><li>• If No, go to Step 6.</li></ul>
5. ICP – Service Provider Communication	<ul style="list-style-type: none"><li>• Inter-Service Provider LNP Operations Flows – Wireless ICP Process, Figure 2, Step 1.</li></ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
6. (Optional) NLSP requests CSR from OLSP	<ul style="list-style-type: none"> <li>As an optional step, the NLSP requests a Customer Service Record (CSR) from the OLSP. A service agreement between the NLSP and OLSP may or may not be required for CSR.</li> <li>NOTE: CSRs are not available from wireless carriers.</li> <li>The Old SP shall not require the New SP to have previously obtained a CSR before they will accept an LSR from the New SP. For those New SPs that choose not to obtain a CSR, they understand that there is heightened risk that their LSR may not be complete and accurate. This is not intended to preclude those providers who provide an ordering GUI from including a step involving a real-time CSR pull within that process, as long as an alternate ordering process is available that does not require a CSR being pulled.</li> <li>CSRs, if requested and available, must be returned within 24 clock hours, unless otherwise negotiated between service providers, excluding weekends and Old Service Provider holidays.</li> <li>Any of the End User validation fields required by the Old SP on an incoming LSR must be available on the CSR, excluding End User requested and assigned password/PIN.</li> <li>Only passwords/PINs requested and assigned by the End User may be utilized as an End User validation field on an incoming LSR by the Old Network Service Provider/Old Local Service Provider. Any service provider assigned password/PIN may not be utilized as a requirement in order to obtain a CSR.</li> </ul>
7. <b>BROADBAND</b> – (optional) Broadband/DSL Verification	<ul style="list-style-type: none"> <li>Inter-Service Provider LNP Operations Flows – Broadband/DSL Verification Process, Figure 3, Step 1.</li> </ul>
8. Does NLSP consider this a Simple Port?	<ul style="list-style-type: none"> <li>If Yes, go to Step 9.                             <ul style="list-style-type: none"> <li>The New SP (the NLSP and/or the NNSP whichever is applicable) must make every reasonable effort to verify that the port request is in fact a Simple Port request, e.g., pulling a CSR if available, or asking the appropriate questions of the End User, etc.</li> </ul> </li> <li>If No, go to Step 10.</li> </ul>
9. <b>SIMPLE LSR-FOC</b> – Service Provider Communication	<ul style="list-style-type: none"> <li>Inter-Service Provider LNP Operations Flows - Wireline Simple Port LSR/FOC Process, Figure 4, Step 1.</li> </ul>
10. <b>NON-SIMPLE LSR-FOC</b> – Service Provider Communication	<ul style="list-style-type: none"> <li>Inter-Service Provider LNP Operations Flows - Wireline Non-Simple Port LSR/FOC Process, Figure 5, Step 1.</li> </ul>
11. <b>MAIN</b> – Main Porting Flow	<ul style="list-style-type: none"> <li>Inter-Service Provider LNP Operations Flows – Main Porting Flow, Figure 6, Step 1.</li> </ul>
12. End	

## Inter-Service Provider LNP Operations Flows – Narratives

### Wireless ICP Service Provider Communication

Figure 2

Flow Step	Description
1. Is NLSP a Reseller?	<ul style="list-style-type: none"> <li>This is the entry point from the Inter-Service Provider LNP Operations Flows – Port Type Determination, Figure 1, Step 5.</li> <li>The NLSP determines if customer is porting all TN(s).</li> <li>If Yes, go to Step 2.</li> <li>If No, go to Step 3.</li> </ul>
2. NLSP sends WPR or WPR information to NNSP for resale service	<ul style="list-style-type: none"> <li>NLSP (Reseller) sends a WPR (Wireless Port Request) or WPR information to the NNSP (may vary slightly depending on provider agreement between the involved service providers).</li> <li>For wireless to wireless service providers the WPR/WPRR (Wireless Port Request/Wireless Port Request Response) initial response time frame is 30 minutes.</li> <li>The due date for a TN ported in an NPA-NXX which has TNs already ported is no earlier than 2 business hours after a confirming WPRR receipt date/time or as currently determined by NANC.</li> </ul>
3. NNSP sends WPR to ONSP	<ul style="list-style-type: none"> <li>The NNSP notifies the ONSP of the port request using the WPR.</li> <li>ICP response interval, currently set to 30 minutes, begins from acknowledgment being received by NNSP from ONSP, and not at the time the WPR is sent from the NNSP to the ONSP.</li> </ul>
4. Is a Type 1 wireless number involved?	<ul style="list-style-type: none"> <li>If Yes, go to Step 5.</li> <li>If No, go to Step 7.</li> </ul>
5. <b>NON-SIMPLE LSR-FOC</b> – Service Provider Communication	<ul style="list-style-type: none"> <li>Inter-Service Provider LNP Operations Flows - Wireline Non-Simple Port LSR/FOC Process, Figure 5, Step 1.</li> </ul>
6. Return to Figure 1	<ul style="list-style-type: none"> <li>Return to Port Type Determination flow Figure 1, Step 5.</li> </ul>
7. Is OLSP a Reseller?	<ul style="list-style-type: none"> <li>If Yes, go to Step 8.</li> <li>If No, go to Step 10.</li> </ul>
8. ONSP sends WPR or WPR information to OLSP	<ul style="list-style-type: none"> <li>The ONSP notifies the OLSP of the port request using the WPR or WPR information.</li> </ul>
9. OLSP sends WPRR or WPRR information to ONSP	<ul style="list-style-type: none"> <li>The OLSP sends the ONSP the WPRR or WPRR information.</li> </ul>
10. ONSP sends WPRR to NNSP	<ul style="list-style-type: none"> <li>ONSP sends the WPRR to the NNSP.</li> <li>IC terminates upon receipt of WPRR by NNSP.</li> </ul>
11. Is NLSP a Reseller?	<ul style="list-style-type: none"> <li>If Yes, go to Step 12.</li> <li>If No, go to Step 13.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
12. NNSP forwards WPRR or WPRR information to NLSP	<ul style="list-style-type: none"><li>• The NNSP sends the WPRR or WPRR information to the NLSP.</li></ul>
13. Is WPRR a Delay?	<ul style="list-style-type: none"><li>• If Yes, go to Step 14.</li><li>• If No, go to Step 15.</li></ul>
14. Is OLSP a Reseller?	<ul style="list-style-type: none"><li>• If Yes, go to Step 9.</li><li>• If No, go to Step 10.</li></ul>
15. Is WPRR confirmed?	<ul style="list-style-type: none"><li>• If Yes, go to Step 17.</li><li>• If No, go to Step 16 – WPRR must be a Resolution Required.</li></ul>
16. WPRR is a resolution response	<ul style="list-style-type: none"><li>• Return to Step 1.</li></ul>
17. Return to Figure 1	<ul style="list-style-type: none"><li>• Return to Port Type Determination flow Figure 1, Step 5.</li></ul>

Broadband/DSL Verification Process  
(optional)  
Figure 3

Flow Step	Description
1. Has it been determined that broadband/DSL is on the line?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 6.</li> <li>• If No, go to Step 2.</li> </ul>
2. Is broadband/DSL service required for new voice service?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 3.</li> <li>• If No, go to Step 10.</li> </ul>
3. NLSP notifies End User to acquire new broadband/DSL service	<ul style="list-style-type: none"> <li>• End User could obtain broadband/DSL service from NLSP, if available, or from another service provider.</li> </ul>
4. NLSP awaits End User response providing broadband/DSL service due date.	<ul style="list-style-type: none"> <li>• This is to ensure that End User has obtained the broadband/DSL service that is necessary for their new voice service.</li> </ul>
5. NLSP continues Port Request with LSR due date on or after broadband/DSL service due date	<ul style="list-style-type: none"> <li>• This is to ensure that new broadband/DSL service is available when the port is activated in order for End User to have voice service.</li> </ul>
6. Does End User wish to retain existing broadband/DSL service?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 7.</li> <li>• If No, go to Step 2.</li> </ul>
7. Does OLSP offer standalone broadband/DSL service?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 9.</li> <li>• If No, go to Step 8.</li> </ul>
8. NLSP notifies End User to acquire new broadband/DSL service if desired.	<ul style="list-style-type: none"> <li>• Go to Step 2.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
9. Does OLSP automatically convert End User to standalone broadband/DSL service?	<ul style="list-style-type: none"><li>• If Yes, go to Step 10.</li><li>• If No, go to Step 8.</li></ul>
10. Return to Figure 1	<ul style="list-style-type: none"><li>• Return to Port Type Determination flow Figure 1, Step 7.</li></ul>


Wireline Simple Port LSR/FOC Process

Figure 4

Flow Step	Description
1. Is NLSP a Class 2 or Class 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 2.</li> <li>• If No, go to Step 3.</li> </ul>
2. NLSP sends LSR or LSR information to NNSP for the Interconnected VoIP service	<ul style="list-style-type: none"> <li>• NLSP sends an LSR or LSR Information to the NNSP fulfilling all requirements of any service agreement between the involved service providers. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).</li> </ul>
3. NNSP sends LSR to ONSP	<ul style="list-style-type: none"> <li>• The NNSP notifies the ONSP of the port using the LSR and sends the information via an electronic gateway, FAX, email, or manual means. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).</li> </ul> <p>NOTE: The New SP (the NLSP and/or the NNSP whichever is applicable) must make every reasonable effort to verify that the port request is in fact a Simple Port request, e.g., pulling a CSR if available, or asking the appropriate questions of the End User, etc.</p>
4. Is OLSP a Class 2 or Class 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 5</li> <li>• If No, go to Step 7</li> </ul>
5. <b>Notify Provider –</b> (conditional) ONSP sends LSR or LSR information to OLSP (Figure 8)	<ul style="list-style-type: none"> <li>• (conditional, based on any service agreement between the involved service providers) – ONSP sends an LSR, LSR Information to the OLSP) fulfilling all requirements. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).</li> <li>• Communication between the ONSP and the OLSP with regard to the port must not delay the validation or processing of the port request.</li> </ul>
6. (conditional) OLSP sends FOC or FOC information to ONSP	<ul style="list-style-type: none"> <li>• (conditional, based on any service agreement between the involved service providers) – The OLSP notifies the ONSP of the port using the FOC and sends the information via an electronic gateway, FAX, email, or other means. The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved.</li> <li>• Communication between the ONSP and the OLSP with regard to the port must not delay the validation or processing of the port request.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
7. Does ONSP agree this is a Simple Port?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 13.</li> <li>• If No, go to Step 8.</li> </ul>
8. Is the LSR complete and accurate?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 9.</li> <li>• If No, go to Step 11.</li> </ul>
9. Will the ONSP FOC current LSR with a different Due Date?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 10.</li> <li>• If No, go to Step 11.</li> </ul>
10. ONSP sends FOC with appropriate Due Date for Non-Simple Port to NNSP	<ul style="list-style-type: none"> <li>• ONSP sends the Firm Order Confirmation (FOC, local response) with the appropriate Due Date for Non-Simple Port to the NNSP for the porting LSR.</li> <li>• For wireline-to-wireline ports, and ports between wireline and wireless service providers, the following requirements apply for the interval to respond to an LSR: <p style="margin-left: 40px;">If the New SP-requested due date is 1-2 Business Days after LSR receipt, the Firm Order Confirmation (FOC) or Reject (whichever is applicable) is due within 4 hours. Refer to the attached chart for LSR Response Due Time:</p> <div style="text-align: center; margin: 10px 0;">  <p>Final Business Week Chart_16Oct2009.do</p> </div> <p style="margin-left: 40px;">If the New SP-requested due date is 3 or more Business Days after LSR receipt, the Firm Order Confirmation (FOC) or Reject (whichever is applicable) is due within 24 clock hours, excluding weekends and Old Service Provider-defined holidays.</p> <p style="margin-left: 40px;">In instances where the LSR indicates the port request is Non-Simple based on the current FCC definition and rule for a Simple Port, the Old SP must return a FOC or appropriate response within 24 clock hours, excluding weekends and Old Service Provider-defined holidays.</p> </li> <li>• It is the responsibility of the ONSP to contact the NNSP if the ONSP is unable to meet the required interval for transmitting the FOC. If the FOC is not received by the NNSP within the required interval, then the NNSP may contact the ONSP.</li> <li>• The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved.</li> </ul>

## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
11. ONSP rejects LSR back to NNSP.	<ul style="list-style-type: none"> <li>The ONSP has determined that this is a Non-Simple Port request and does not FOC with a Due Date that is appropriate for a Non-Simple Port. As a result, the ONSP rejects the LSR back to the NNSP in the appropriate timeframe indicated in Step 10.</li> </ul>
12. <b>NON-SIMPLE LSR-FOC – Service Provider Communication</b>	<ul style="list-style-type: none"> <li>Inter-Service Provider LNP Operations Flows - Wireline Non-Simple Port LSR/FOC Process, Figure 5, Step 1.</li> </ul>
13. Is the LSR complete and accurate?	<ul style="list-style-type: none"> <li>If Yes, go to Step 15.</li> <li>If No, go to Step 14.</li> </ul>
14. ONSP rejects LSR to NNSP.	<ul style="list-style-type: none"> <li>ONSP sends a Reject Notification to the NNSP due to insufficient data on the LSR.</li> <li>Return to Figure 4, Step 1.</li> </ul>
15. ONSP sends FOC confirming Simple Port Request to NNSP.	<ul style="list-style-type: none"> <li>ONSP sends the Firm Order Confirmation (FOC, local response) to the NNSP for the porting LSR.</li> <li>For wireline to wireline ports, and ports between wireline and wireless service providers, the following requirements apply for the interval to respond to an LSR: <ul style="list-style-type: none"> <li>If the New SP-requested due date is 1-2 Business Days after LSR receipt, the Firm Order Confirmation (FOC) or Reject (whichever is applicable) is due within 4 hours. Refer to the attached chart for LSR Response Due Time:</li> </ul> <div data-bbox="711 1129 776 1192" data-label="Image"> </div> <div data-bbox="639 1192 850 1247" data-label="Text"> <p>Final Business Week Chart_16Oct2009.do</p> </div> <li>If the New SP-requested due date is 3 or more Business Days after LSR receipt, the Firm Order Confirmation (FOC) or Reject (whichever is applicable) is due within 24 clock hours, excluding weekends and Old Service Provider-defined holidays.</li> <li>In instances where the LSR indicates the port request is Non-Simple based on the current FCC definition and rule for a Simple Port, the Old SP must return a FOC or appropriate response within 24 clock hours, excluding weekends and Old Service Provider-defined holidays.</li> <li>The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved.</li> </li></ul>

## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
16. Is NLSP a Class 2 or Class 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"><li>• If Yes, go to Step 17.</li><li>• If No, go to Step 18.</li></ul>
17. NNSP sends FOC or FOC information to NLSP.	<ul style="list-style-type: none"><li>• NNSP sends FOC or FOC Information to NLSP fulfilling all requirements of any service agreement between the involved service providers. The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).</li></ul>
18. Return to Figure 1	<ul style="list-style-type: none"><li>• Return to Port Type Determination flow Figure 1, Step 9.</li></ul>



Wireline Non-Simple Port LSR/FOC Process

Figure 5

Flow Step	Description
1. Is End User porting all TNs?	<ul style="list-style-type: none"> <li>The NLSP determines if customer is porting all TN(s).</li> <li>If Yes, go to Step 3.</li> <li>If No, go to Step 2.</li> </ul>
2. NLSP notes “Not all TNs are being ported” in the remarks section of LSR	<ul style="list-style-type: none"> <li>The NLSP makes a note in the remarks section of the LSR to identify that the End User is not porting all TN(s). This can affect the due date interval due to account rearrangements necessary prior to service order issuance.</li> </ul>
3. Is NLSP a Reseller or Class 2 or 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"> <li>If Yes, go to Step 4.</li> <li>If No, go to Step 5.</li> </ul>
4. NLSP sends LSR or LSR information to NNSP for resale or VoIP Interconnection service	<ul style="list-style-type: none"> <li>NLSP (Reseller or Class 2 or 3 Interconnected VoIP Provider) sends an LSR or LSR Information to the NNSP fulfilling all requirements of any service agreement between the involved service providers. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).</li> </ul>
5. NNSP sends LSR to ONSP	<ul style="list-style-type: none"> <li>The NNSP notifies the ONSP of the port using the LSR and sends the information via an electronic gateway, FAX, email, or manual means. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).</li> </ul>
6. Has the ONSP determined the LSR is incomplete or inaccurate?	<ul style="list-style-type: none"> <li>If Yes, go to Step 7.</li> <li>If No, go to Step 8.</li> </ul>
7. ONSP rejects LSR back to NNSP	<ul style="list-style-type: none"> <li>ONSP sends a Reject Notification to the NNSP due to insufficient or inaccurate data on the LSR.</li> <li>Return to Figure 5, Step 1.</li> </ul>
8. Is OLSP a Reseller or Class 2 or 3 Interconnected VoIP Provider or is a Type 1 wireless number involved?	<ul style="list-style-type: none"> <li>If Yes, go to Step 9.</li> <li>If No, go to Step 13.</li> </ul>

## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
<p>9. <b>Notify Provider –</b> (conditional) ONSP sends LSR, LSR information, to OLSP</p>	<ul style="list-style-type: none"> <li>• (conditional, based on any service agreement between the involved service providers) – ONSP sends an LSR, LSR Information to the OLSP (Reseller or Class 2 or 3 Interconnected VoIP Provider or if a Type 1 number is involved) fulfilling all requirements. The LSR process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF).</li> <li>• Communication between the ONSP and the OLSP with regard to the port must not delay the validation or processing of the port request.</li> <li>• Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification – Figure 8.</li> </ul>
<p>10. Has the OLSP determined the LSR is incomplete or inaccurate?</p>	<ul style="list-style-type: none"> <li>• If Yes, go to Step 11.</li> <li>• If No, go to Step 12.</li> </ul>
<p>11. OLSP rejects LSR back to ONSP</p>	<ul style="list-style-type: none"> <li>• OLSP sends a Reject Notification to the ONSP due to insufficient or inaccurate data on the LSR.</li> <li>• Return to Figure 5, Step 1.</li> </ul>
<p>12. (conditional) OLSP sends FOC or FOC information to ONSP</p>	<ul style="list-style-type: none"> <li>• (conditional, based on any service agreement between the involved service providers) – The OLSP notifies the ONSP of the porting using the FOC and sends the information via an electronic gateway, FAX, email, or other means. The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved.</li> <li>• Communication between the ONSP and the OLSP with regard to the port must not delay the validation or processing of the port request.</li> </ul>
<p>13. ONSP sends FOC to NNSP</p>	<ul style="list-style-type: none"> <li>• ONSP sends the Firm Order Confirmation (FOC, local response) to the NNSP for the porting LSR.</li> <li>• For wireline to wireline service providers, and between wireline and wireless service providers, the requirement is that the FOC is returned within 24 clock hours, excluding weekends and Old Service Provider-defined holidays. It is the responsibility of the ONSP to contact the NNSP if the ONSP is unable to meet the 24 clock hour requirement (excluding weekends and Old Service Provider-defined holidays) for transmitting the FOC. If the FOC is not received by the NNSP within 24 clock hours (excluding weekends and Old Service Provider-defined holidays), then the NNSP may contact the ONSP.</li> <li>• It is assumed that the porting interval is not in addition to intervals for other requested services (e.g., unbundled loops) related to the porting request. The interval becomes the longest single interval required for the services requested.</li> <li>• The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
14. Is NLSP a Reseller or Class 2 or 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"><li>• If Yes, go to Step 15.</li><li>• If No, go to Step 16.</li></ul>
15. NNSP forwards FOC or FOC information to NLSP	<ul style="list-style-type: none"><li>• NNSP forwards FOC or FOC Information to NLSP fulfilling all requirements of any service agreement between the involved service providers. The LSR/FOC process is defined by the Ordering and Billing Forum (OBF) and the electronic interface by the Telecommunications Industry Forum (TCIF). The information required on the FOC may vary based on the carriers involved.</li></ul>
16. Return to Figure 1	<ul style="list-style-type: none"><li>• Return to Port Type Determination flow Figure 1, Step 10.</li></ul>



## Inter-Service Provider LNP Operations Flows – Narratives

### Main Porting Flow

Figure 6

Flow Step	Description
1. Are NNSP and ONSP the same SP?	<ul style="list-style-type: none"><li>• If Yes, go to Step 2.</li><li>• If No, go to Step 4.</li></ul>
2. Is NPAC processing required?	<ul style="list-style-type: none"><li>• If Yes, go to Step 3.</li><li>• If No, go to Step 14.</li></ul>
3. Perform intra-provider port or modify existing SV	<ul style="list-style-type: none"><li>• NNSP enters intra-provider SV create data into the NPAC via the SOA interface for porting of End User in accordance with the NANC FRS and the NANC IIS. Upon completion of intra-provider port, Return to Port Type Determination flow Figure 1, Step 11.</li></ul>
4. NNSP coordinates all porting activities	<ul style="list-style-type: none"><li>• The NNSP must coordinate porting timeframes with the ONSP, and both provide appropriate messages to the NPAC. Upon completion of the LSR/FOC or ICP Process, and when ready to initiate service orders, go to Step 5.</li></ul>
5. NNSP and ONSP create and process service orders	<ul style="list-style-type: none"><li>• Upon completion of the LSR/FOC or ICP Process, the NNSP and ONSP create and process service orders through their internal service order systems, based on information provided in the LSR/FOC or WPR/WPRR.</li></ul>
6. <b>Create</b> – Service Provider Port Request	<ul style="list-style-type: none"><li>• Inter-Service Provider LNP Operations Flows – Subscription Version Create Flow, Figure 7.</li></ul>
7. Was port request canceled?	<ul style="list-style-type: none"><li>• The port can be canceled by the ONSP, the NNSP, or automatically by an NPAC process.</li><li>• If Yes, go to Step 12.</li><li>• If No, go to Step 8.</li></ul>

## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
8. Did ONSP place the order in Conflict?	<ul style="list-style-type: none"> <li>• Check Concurrence Flag. If concurred, the ONSP agrees to the port. If not concurred, a conflict cause code as defined in the FRS, is designated. ONSP makes a concerted effort to contact NNSP prior to placing SV in conflict.                             <ul style="list-style-type: none"> <li>• For wireline Simple Ports, the conflict request can be initiated up to the later of a.) the tunable time (Simple Port Conflict Restriction Window, current value of 9:00pm in the predominate time zone of the NPAC region where the number is being ported) one Business Day before the Due Date or b.) the T2 Timer (Final Concurrence Window tunable parameter) has expired.</li> <li>• For wireline Non-Simple Ports, the conflict request can be initiated up to the later of a.) the tunable time (Conflict Restriction Window, current value of 12:00pm) one Business Day before the Due Date or b.) the T2 Timer (Final Concurrence Window tunable parameter) has expired.</li> <li>• For wireless SPs using short timers for this SV, the conflict request can be initiated up to the time the T2 Timer (Final Concurrence Window tunable parameter) has expired.</li> </ul> </li> <li>• If Yes, go to Step 11.</li> <li>• If No, go to Step 9.</li> </ul>
9. NNSP coordinates physical changes with ONSP	<ul style="list-style-type: none"> <li>• The NNSP has the option of requesting a coordinated order. This is also the re-entry point from the Inter-Service Provider LNP Operations Flows – Conflict Flow for the Service Creation Provisioning Process, tie point BB, Figure 11.</li> <li>• If coordination is requested on the LSR, an indication of Yes or No for the application of a 10-digit trigger is required. If No coordination indication is given, then by default, the 10-digit trigger is applied if technically feasible. If the NNSP requests a coordinated order and specifies 'No' on the application of the 10-digit trigger, the ONSP uses the 10-digit trigger at its discretion.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
10. Is the unconditional 10 digit trigger being used or does ONSP query on every call?	<ul style="list-style-type: none"> <li>• The unconditional 10-digit trigger is assigned to a number on a donor switch during the transition period when the number is physically moved from donor switch to recipient switch. During this period it is possible for the TN to reside in both donor and recipient switches at the same time.</li> <li>• For both Simple and Non-Simple Ports, the ONSP must deploy the 10-digit trigger in the donor switch, if technically feasible, or monitor the NPAC for activation in order to trigger the disconnect, or carriers perform a database query for every call origination.</li> <li>• A 10-digit trigger is applied by the ONSP no later than 11:59pm the day prior to the due date.</li> <li>• The unconditional 10-digit trigger may be applied by the NNSP.</li> <li>• If Yes, go to Inter-Service Provider LNP Operations Flows - Provisioning with Unconditional 10-Digit Trigger - tie point AA, Figure 10.</li> <li>• If No, go to Inter-Service Provider LNP Operations Flows - Provisioning without Unconditional 10-digit Trigger - tie point A, Figure 9.</li> </ul>
11. NPAC logs request to place the order in conflict, including cause code	<ul style="list-style-type: none"> <li>• Go to Inter-Service Provider LNP Operations Flows - Conflict Flow for the Service Creation Provisioning Process - tie point B, Figure 11.</li> </ul>
12. <b>Notify Provider</b> – NPAC notifies NNSP and ONSP that port is canceled	<ul style="list-style-type: none"> <li>• Upon cancellation, NPAC logs this information, and changes the subscription status to <i>canceled</i>. Both SPs are notified of the change in the subscription status via the SOA interface.</li> <li>• For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>• Both SPs take appropriate action related to internal work orders.</li> </ul>
13. <b>Notify Provider</b> – (conditional) ONSP sends loss notification to OLSP	<ul style="list-style-type: none"> <li>• (conditional, , based on any service agreement between the involved service providers) – A loss notification may be sent to the OLSP. The specific timing will be based on the requirements of any service agreement between the involved service providers. It is necessary for the OLSP to terminate the End User's service for the ported TN(s) after the port is completed.</li> <li>• Communication between the ONSP and the OLSP with regard to the port must not delay the validation or processing of the port request</li> <li>• This is also the re-entry point from various flows, tie point Z.</li> </ul>
14. Return to Figure 1	<ul style="list-style-type: none"> <li>• Return to Port Type Determination flow Figure 1, Step 11.</li> </ul>



## Subscription Version Create Flow

Figure 7

Flow Step	Description
1. NNSP and ONSP Notify NPAC with Create message	<ul style="list-style-type: none"> <li>• Due date of the SV Create message is the due date on the FOC, where wireline due date equals date and time normalized to 00:00:00, and wireless due date equals date and time. For porting between wireless and wireline, the wireline due date format applies. Any change of due date in the NPAC must be a result of a change in the FOC due date. Exceptions may be made upon agreement between the porting parties (NNSP and ONSP).</li> <li>• SPs enter SV data into the NPAC via the SOA interface for porting of End User in accordance with the NANC FRS and the NANC IIS.</li> <li>• The NPAC/SMS expects to receive matching SV Create messages from the ONSP and the NNSP when facilitating porting of a telephone number. However, to prevent the possibility of the ONSP unnecessarily delaying a port, two timers were developed and referred to as T1 and T2. If the ONSP does not send a matching SV create message (indicating either concurrence or conflict) to the NPAC, once both the T1 and T2 timers expire the NNSP can proceed with porting the telephone number on the FOC due date (SV Due Date). Exceptions may be made upon agreement between the porting parties (NNSP and ONSP) allowing earlier activation. While some service providers choose not to send the concurring SV Create, but rather allow the timers to expire, the LNPA Working Group concludes that all service providers should send the matching SV Create messages to the NPAC/SMS. This will facilitate expeditious porting of telephone numbers and is more efficient than merely allowing timers to expire. The increased efficiency is especially beneficial in meeting the FCC mandated 1-day interval for Simple Ports. [Note that the order in which the ONSP and NNSP Create messages arrive at the NPAC/SMS is immaterial.]</li> <li>• With regard to the population of the Due Time on the NNSP and ONSP NPAC Create messages, current industry practices for both Mechanized SOA and Low Tech Interface (LTI) users will be maintained for Simple Ports. The NNSP may not activate a port before midnight (00:00:00) local time of the FOC due date (SV Due Date) unless it has been verified with the ONSP that the port could be activated early without impacting the customer's service, or an earlier due date has been agreed to between the porting parties (ONSP and NNSP). Failing to verify first that the ONSP has completed all necessary steps in the port-out process, e.g., established the 10-Digit Unconditional Trigger, resolved any order fallout in systems, etc., could result in the customer's service being negatively impacted, such as inability to receive all of their calls.</li> </ul>

## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
2. Is Create message valid?	<ul style="list-style-type: none"> <li>NPAC validates data to ensure value formats and consistency as defined in the FRS. This is not a comparison between NNSP and ONSP messages.</li> <li>If Yes, go to Step 4. If this is the first valid create message, the T1 Timer (Initial Concurrence Window tunable parameter) is started. SV Create Notifications are sent to both the ONSP and NNSP.</li> <li>If No, go to Step 3.</li> </ul>
3. NPAC notifies appropriate Service Provider that create message is invalid	<ul style="list-style-type: none"> <li>If the data is not valid, the NPAC sends error Notification to the SP for correction.</li> <li>The SP, upon Notification from the NPAC, corrects the data and resubmits to the NPAC. Re-enter at Step 1.</li> </ul>
4. NPAC starts T1 timer	<ul style="list-style-type: none"> <li>Upon receipt of the first valid create message, the NPAC starts the T1 Timer (Initial Concurrence Window tunable parameter). The value for the T1 Timer is configurable (one of three values) for SPs. Wireline and Intermodal ports will use either long or medium timers. The current value for the long timer (typically any wireline-involved Non-Simple porting) is nine (9) NPAC business hours. The current value for the medium timer (typically any wireline-involved Simple porting) is three (3) NPAC business hours. The current value for the short timer (typically wireless-to-wireless porting) is one (1) NPAC business hour.</li> </ul>
5. T1 expired?	<ul style="list-style-type: none"> <li>Short business hours (for wireline-involved Non-Simple porting) are defined as 7a-7p CT Monday through Friday, excluding NPAC-defined Holidays (Business Day start at 13:00/12:00 GMT, duration of 12 hours).</li> <li>Medium business hours (for wireline-involved Simple porting) are defined as 7a-12a Monday through Friday, excluding NPAC-defined Holidays in the predominant time zone for each NPAC region (Business Day start at NE/MA/SE [eastern time zone] 12:00/11:00 GMT, MW/SW/Canadian [central time zone] 13:00/12:00 GMT, WE [mountain time zone] 14:00/13:00 GMT, WC [west coast time zone] 15:00/14:00 GMT, duration of 17 hours).</li> <li>Long business hours (for wireless-to-wireless porting) are planned for 9a-9p in the predominant time zone for each NPAC region (Business Day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours).</li> <li>Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region.</li> <li>If Yes, go to Step 10.</li> <li>If No, go to Step 6.</li> </ul>
6. Received Second Create?	<ul style="list-style-type: none"> <li>If Yes, go to Step 7.</li> <li>If No, return to Step 5.</li> </ul>
7. Is Create message valid?	<ul style="list-style-type: none"> <li>If Yes, go to Step 8.</li> <li>If No, go to Step 9.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
8. Return to Figure 6	<ul style="list-style-type: none"><li>• The porting process continues.</li><li>• Return to Main Porting Flow Figure 6, Create Process, Step 6.</li></ul>
9. NPAC notifies appropriate Service Provider that Create message is invalid	<ul style="list-style-type: none"><li>• The NPAC informs the SP of an invalid create. If necessary, the notified Service Provider coordinates the correction.</li><li>• Return to Step 5.</li></ul>
10. NPAC notifies NNSP and ONSP that T1 has expired, and then starts T2 Timer	<ul style="list-style-type: none"><li>• The NPAC informs the NNSP and ONSP of the expiration of the T1 Timer.</li><li>• Upon expiration, the NPAC starts the T2 Timer (Final Concurrence Window tunable parameter).</li></ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
11. T2 Expired?	<ul style="list-style-type: none"> <li>• The NPAC provides a T2 Timer (Final Concurrence Window tunable parameter) that is defined as the number of hours after the expiration of the T1 Timer.</li> <li>• The value for the T2 Timer is configurable (one of three values) for SPs. Wireline and Intermodal ports will use either long or medium timers. The current value for the long timer (typically any wireline-involved Non-Simple porting) is nine (9) NPAC business hours. The current value for the medium timer (typically any wireline-involved Simple porting) is three (3) NPAC business hours. The current value for the short timer (typically wireless-to-wireless porting) is one (1) NPAC business hour.</li> <li>• Short business hours (for wireline-involved Non-Simple porting) are defined as 7a-7p CT Monday through Friday, excluding NPAC-defined Holidays (Business Day start at 13:00/12:00 GMT, duration of 12 hours).</li> <li>• Medium business hours (for wireline-involved Simple porting) are defined as 7a-12a Monday through Friday, excluding NPAC-defined Holidays in the predominant time zone for each NPAC region (Business Day start at NE/MA/SE [eastern time zone] 12:00/11:00 GMT, MW/SW/Canadian [central time zone] 13:00/12:00 GMT, WE [mountain time zone] 14:00/13:00 GMT, WC [west coast time zone] 15:00/14:00 GMT, duration of 17 hours).</li> <li>• Long business hours (for wireless-to-wireless porting) are planned for 9a-9p in the predominant time zone for each NPAC region (Business Day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours).</li> <li>• Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region.</li> <li>• If Yes, go to Step 15.</li> <li>• If No, go to Step 12.</li> </ul>
12. Receives Second Create?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 13.</li> <li>• If No, return to Step 11.</li> </ul>
13. Is Create message valid?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 19.</li> <li>• If No, go to Step 14.</li> </ul>
14. NPAC notifies appropriate service provider that Create message is invalid	<ul style="list-style-type: none"> <li>• The NPAC notifies the service provider that errors were encountered during the validation process.</li> <li>• Return to Step 11.</li> </ul>
15. Did NNSP send Create?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 20.</li> <li>• If No, go to Step 16.</li> </ul>

## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
16. NPAC notifies NNSP and ONSP that T2 has expired	<ul style="list-style-type: none"><li>• The NPAC notifies both NNSP and ONSP of T2 expiration.</li></ul>
17. Has cancel window for pending SVs expired?	<ul style="list-style-type: none"><li>• If Yes, go to Step 18.</li><li>• If No, return to Step 12.</li></ul>
18. <b>Notify Provider</b> – NPAC notifies NNSP and ONSP that port is canceled	<ul style="list-style-type: none"><li>• The SV is canceled by NPAC by tunable parameter (30 days). Both SPs take appropriate action related to internal work orders.</li><li>• For the Notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type1 Notification, Figure 8.</li></ul>
19. Return to Figure 6	<ul style="list-style-type: none"><li>• Return to Main Porting Flow Figure 6, Create Process, Step 6.</li></ul>
20. NPAC notifies ONSP that porting proceeds under the control of the NNSP	<ul style="list-style-type: none"><li>• A Notification message is sent to the ONSP noting that the porting is proceeding in the absence of any message from the ONSP.</li></ul>

Reseller/Interconnected VoIP Provider/Type 1 Notification Flow

Figure 8

Flow Step	Description
1. Is OLSP a Reseller or a Class 2 or 3 Interconnected VoIP Provider or is a Type 1 wireless number involved?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 2.</li> <li>• If No, go to Step 4.</li> </ul>
2. Does OLSP need message?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 3.</li> <li>• If No, go to Step 4.</li> </ul>
3. ONSP sends or provides information and/or message to OLSP	<ul style="list-style-type: none"> <li>• ONSP (Network Provider) sends or provides information and/or message to the OLSP (Reseller or Class 2/3 Interconnected VoIP Provider or wireline provider providing Type 1 arrangement) fulfilling all requirements of any service agreement between the involved service providers.</li> </ul>
4. Is NLSP a Reseller or Class 2 or 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 5.</li> <li>• If No, go to Step 7.</li> </ul>
5. Does NLSP need message?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 6.</li> <li>• If No, go to Step 7.</li> </ul>
6. NNSP sends or provides information and/or message to NLSP	<ul style="list-style-type: none"> <li>• NNSP (Network Provider) sends or provides information and/or message to the NLSP (Reseller or Class 2 or 3 Interconnected VoIP Provider) fulfilling all requirements of any service agreement between the involved service providers.</li> </ul>
7. Return	<ul style="list-style-type: none"> <li>• Return to previous flow.</li> </ul>



Provisioning Without Unconditional 10-Digit Trigger

Flow A, Figure 9

Flow Step	Description
<b>NOTE: Steps 1 and 2 are worked concurrently.</b>	
1. NNSP activates port (locally)	<ul style="list-style-type: none"> <li>This is the entry point from the Inter-Service Provider LNP Operations Flows – Main Porting Flow, tie point A, Figure 6.</li> <li>The Wireline NNSP activates its own switch translations.</li> <li>As an optional step, the Wireless NNSP activates its own switch/HLR configuration including assignment of Mobile Station Identifier (MSID).</li> </ul>
<b>NOTE: Steps 2 and 3 may be worked concurrently.</b>	
2. NNSP and ONSP make physical changes (where necessary)	<ul style="list-style-type: none"> <li>Wireline physical changes may or may not be coordinated. Coordinated physical changes are based on inter-connection agreements between the involved service providers.</li> <li>Mobile Station (handset) changes are completed.</li> <li>The NNSP is now providing dial tone to ported End User.</li> </ul>
3. NNSP notifies NPAC to activate the port	<ul style="list-style-type: none"> <li>The NNSP sends an activate message to the NPAC via the SOA interface.</li> <li>No NPAC SV may activate before the FOC due date/time. Unless otherwise agreed to between both porting parties (ONSP and NNSP) the SV Due Date is the FOC due date agreed upon between the ONSP and NNSP.</li> <li>If not done in Step 1 above, the Wireless NNSP activates its own switch/HLR configuration including assignment of Mobile Station Identifier (MSID).</li> </ul>
<b>NOTE: Steps 4, 5, 6, and 7 may be concurrent, but at a minimum should be completed ASAP.</b>	
4. NPAC downloads (real time) to all service providers	<ul style="list-style-type: none"> <li>The NPAC broadcasts new SV data to all SP LSMSs in the serving area in accordance with the NANC FRS and NANC IIS. The Service Control Point (SCP) Applications and Global Title Translations (GTT) Function for Number Portability requirements are defined by T1S1.6.</li> </ul>
5. NPAC records date and time in history file	<ul style="list-style-type: none"> <li>The NPAC records the current date and time as the Activation Date and Time stamp, at the start of the broadcast. The Activation Complete Timestamp is based on the first LSMS that successfully acknowledged receipt of new SV.</li> </ul>
6. ONSP removes translations in the switch/HLR	<ul style="list-style-type: none"> <li>The Wireline ONSP initiates the removal of translations either at designated Due Date and Time, or if the order was designated as coordinated, upon receipt of a call from the NNSP.</li> <li>The Wireless ONSP initiates the removal of the subscriber record from the switch/HLR after the activation of the port.</li> <li>It is necessary for the OLSP to terminate the End User's service for the ported TN(s) after the port is completed.</li> </ul>

## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
7. NPAC logs failures and non-responses and notifies the NNSP and ONSP	<ul style="list-style-type: none"><li>• The NPAC resends the activation to an LSMS that did not acknowledge receipt of the request, based on the retry tunable and retry interval. The number of NPAC SMS attempts to send is a tunable parameter for which the current setting is one (1) attempt, in which case no retry attempts are performed. Once this cycle is completed, NPAC personnel, when requested, investigate possible problems. In addition, the NPAC sends a Notification via the SOA interface to both NNSP and ONSP with a list of LSMSs that failed activation.</li></ul>
8. All service providers update routing databases (real time download)	<ul style="list-style-type: none"><li>• This is an internal process and is performed in accordance with the Service Control Point (SCP) Applications and GTT Function for Number Portability requirements as defined by ATIS T1S1.6 (within 15 minutes).</li></ul>
9. NNSP may verify completion	<ul style="list-style-type: none"><li>• The NNSP may make test calls to verify that calls to ported numbers complete as expected.</li></ul>
Z. End	<ul style="list-style-type: none"><li>• Return to Main Porting Flow, tie point Z, Figure 6.</li></ul>



## Inter-Service Provider LNP Operations Flows – Narratives

### Provisioning With Unconditional 10-Digit Trigger

#### Flow AA, Figure 10

Flow Step	Description
1. ONSP activates unconditional 10 digit trigger in the switch	<ul style="list-style-type: none"><li>• This is the entry point from the Inter-Service Provider LNP Operations Flows – Main Porting Flow, tie point AA, Figure 6.</li><li>• For both Simple and Non-Simple Ports, the wireline ONSP must deploy the 10-digit trigger in the donor switch, if technically feasible, or monitor the NPAC for activation in order to trigger the disconnect, or carriers perform a database query for every call origination.</li><li>• A 10-digit trigger is applied by the ONSP no later than 11:59pm the day prior to the due date.</li><li>• The unconditional 10-digit trigger may optionally be applied by the NNSP.</li></ul>
<b>NOTE: Steps 2 and 3 may be worked concurrently.</b>	
2. NNSP activates switch translations	<ul style="list-style-type: none"><li>• The NNSP activates its own switch translations.</li></ul>
3. NNSP and ONSP make physical changes (where necessary)	<ul style="list-style-type: none"><li>• Any physical work or changes are made by either NNSP or ONSP, as necessary.</li><li>• Physical changes may or may not be coordinated. Coordinated physical changes are based on inter-connection agreements between the involved service providers.</li><li>• The NNSP is now providing dial-tone to ported in user</li></ul>
4. NNSP notifies NPAC to activate the port	<ul style="list-style-type: none"><li>• The NNSP sends an activate message via the SOA interface to the NPAC.</li><li>• No NPAC SV may activate before the FOC due date/time. Unless otherwise agreed to between both porting parties (ONSP and NNSP) the SV Due Date is the FOC due date agreed upon between the ONSP and NNSP.</li></ul>
<b>NOTE: Steps 5, 6, and 7 may be concurrent, but at a minimum should be completed ASAP.</b>	
5. NPAC downloads (real time) to all service providers	<ul style="list-style-type: none"><li>• The NPAC broadcasts new SV data to all SPs in the serving area in accordance with the NANC FRS and NANC IIS. The Service Control Point (SCP) Applications and GTT Function for Number Portability requirements are defined by T1S1.6.</li></ul>
6. NPAC records date and time in history file	<ul style="list-style-type: none"><li>• The NPAC records the current date and time as the Activation Date and Time stamp, at the start of the broadcast. The Activation Complete Timestamp is based on the first LSMS that successfully acknowledged receipt of new subscription version.</li></ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
7. NPAC logs failures and non-responses and notifies the NNSP and ONSP	<ul style="list-style-type: none"> <li>The NPAC resends the activation to a Local SMS that did not acknowledge receipt of the request, based on the retry tunable and retry interval. The number of NPAC attempts to send is a tunable parameter for which the current setting is one (1) attempt, in which case no retry attempts are performed. Once this cycle is completed NPAC personnel, when requested, investigate possible problems. In addition, the NPAC sends a Notification via the SOA interface to both the NNSP and ONSP with a list of LSMSs that failed activation.</li> </ul>
8. All service providers update routing data (real time download)	<ul style="list-style-type: none"> <li>This is an internal process and is performed in accordance with the Service Control Point (SCP) Applications and GTT Function for Number Portability requirements as defined by ATIS T1S1.6 (within 15 minutes).</li> </ul>
9. ONSP removes appropriate translations	<ul style="list-style-type: none"> <li>After update of its databases the ONSP removes translations associated with the ported TN(s). The removal of these translations (1.) will not be done until the old Service Provider has evidence that the port has occurred, or (2.) will not be scheduled earlier than 11:59 PM one day after the due date, or (3.) will be scheduled for 11:59 PM on the due date, but can be changed by an LSR supplement received no later than 9:00 PM local time on the due date. This LSR supplement must be submitted in accordance with local practices governing LSR exchange, including such communications by telephone, fax, etc.</li> <li>It is necessary for the OLSP to terminate the End User's service for the ported TN(s) after the port is completed.</li> </ul>
10. NNSP may verify completion	<ul style="list-style-type: none"> <li>The NNSP may make test calls to verify that calls to ported numbers complete as expected.</li> </ul>
Z. End	<ul style="list-style-type: none"> <li>Return to Main Porting Flow, tie point Z, Figure 6.</li> </ul>

Conflict Flow For The Service Creation Provisioning Process

Flow B, Figure 11

Flow Step	Description
1. Is conflict restricted?	<ul style="list-style-type: none"> <li>• The conflict flow is entered through the Provisioning process flow (Main Porting Flow) through tie point (B), Figure 6, when the ONSP enters a concurrence flag of “No”, and designates a conflict cause code.</li> <li>• Conflict is restricted (i.e., SV may not be placed into conflict by the ONSP) if one of the following: <ul style="list-style-type: none"> <li>• The ONSP previously placed the subscription into conflict, or</li> <li>• The ONSP never sent a create message for this subscription, or</li> <li>• The request was initiated too late: <ul style="list-style-type: none"> <li>• For wireline Simple Ports, the request was initiated after the tunable time (Simple Port Conflict Restriction Window, current value of 9:00pm in the predominate time zone of the NPAC region where the number is being ported) one Business Day before the Due Date and T2 Timer (Final Concurrence Window tunable parameter) has expired.</li> <li>• For wireline Non-Simple Ports, the request was initiated after the tunable time (Conflict Restriction Window, current value of 12:00) one Business Day before the Due Date and T2 Timer (Final Concurrence Window tunable parameter) has expired.</li> <li>• For wireless SPs using short timers for this SV, the request was initiated after the T2 Timer (Final Concurrence Window tunable parameter) has expired.</li> </ul> </li> </ul> </li> <li>• If Yes, go to Step 2.</li> <li>• If No, go to Step 3.</li> </ul>
2. NPAC rejects the conflict request	<ul style="list-style-type: none"> <li>• NPAC notifies SP of rejection.</li> <li>• The porting process resumes as normal, proceeding to the Provisioning process flow (Main Porting Flow) at tie point BB, Figure 6.</li> </ul>
3. <b>Notify Provider</b> – NPAC changes the subscription status to conflict and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>• For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>• Both SPs take appropriate action related to internal work orders.</li> <li>• SVs may be modified while in the conflict state (e.g., due date), by either the NNSP or ONSP.</li> </ul>
4. NNSP contacts ONSP to resolve conflict. If no agreement is reached, begin normal escalation	<ul style="list-style-type: none"> <li>• The escalation process is defined in the inter-company agreements between the involved service providers.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
5. Was conflict resolved within conflict expiration window?	<ul style="list-style-type: none"> <li>From the time an SV is placed in conflict, there is a tunable window (Conflict Expiration Window, current value of 30-calendar day limit after the due date) after which it is removed from the NPAC database. If it is resolved within the tunable window, go to Step 7; if not, the subscription request will “time out” and go to Step 6.</li> </ul>
6. <b>Notify Provider</b> – NPAC initiates cancellation and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>For the Notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>Both SPs take appropriate action related to internal work orders.</li> </ul>
7. Was port request canceled to resolve conflict?	<ul style="list-style-type: none"> <li>Conflict resolution initiates one of two actions: 1) cancellation of the subscription, or 2) resumption of the service creation provisioning process. If the conflict is resolved by cancellation of the subscription, then proceed to the Cancellation Flows for Provisioning Process through tie point C, Figure 12. If the conflict is otherwise resolved, go to Step 8.</li> </ul>
8. Was resolution message from ONSP?	<ul style="list-style-type: none"> <li>If Yes, go to Step 9.</li> <li>If No, go to Step 10.</li> </ul>
9. <b>Notify Provider</b> – NPAC notifies the NNSP and ONSP of “conflict off” via SOA	<ul style="list-style-type: none"> <li>For the Notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>NPAC notifies both SPs of the change in SV status. The porting process resumes as normal, proceeding to the Provisioning process flow (Main Porting Flow) at tie point BB, Figure 6.</li> </ul>
10. Did NNSP send resolution message during the restriction window?	<ul style="list-style-type: none"> <li>If conflict was resolved within tunable business hours (current values of six hours for wireline-involved Non-Simple Ports [Long Conflict Resolution New Service Provider Restriction], two hours for wireline-involved Simple Ports [Medium Conflict Resolution New Service Provider Restriction], and six hours for wireless [Short Conflict Resolution New Service Provider Restriction] ), only the ONSP may notify NPAC of “conflict off”. If conflict was resolved after tunable hours, either the NNSP or ONSP may notify NPAC of “conflict off”.</li> <li>In order for the porting process to continue at least one SP must remove the SV from conflict.</li> <li>If Yes, go to Step 11.</li> <li>If No, go to Step 12.</li> </ul>
11. NPAC rejects the conflict resolution request from NNSP	<ul style="list-style-type: none"> <li>NPAC sends an error to the NNSP indicating conflict resolution is not valid at this point in time.</li> <li>Return to Step 5.</li> </ul>
12. Was the Conflict Cause Code 50 or 51?	<ul style="list-style-type: none"> <li>If Yes, go to Step 11.</li> <li>If No, go to Step 9.</li> </ul>
Z. End	<ul style="list-style-type: none"> <li>Return to Main Porting Flow, tie point Z, Figure 6.</li> </ul>



## Cancellation Flows For Provisioning Process

### Cancel Flow, Figure 12

#### Introduction

A service order and/or subscription may be cancelled through the following processes:

- The End User contacts the NLSP or OLSP and requests cancellation of their porting request.
- Conflict Flow For The Service Creation Provisioning Process – Flow B, Figure 11: As a result of the Conflict Resolution process (at tie-point C) the NLSP and OLSP agree to cancel the SV and applicable service orders.

Flow Step	Description
1. End User request to cancel	<ul style="list-style-type: none"> <li>• The Cancellation Process may begin with an End User requesting cancellation of their pending port. The Cancellation process flow applies only to that period of time between SV creation, and either activation or cancellation of the porting request. If activation completed and the End User wishes to revert back to the former SP, it is accomplished via the Provisioning Process.</li> </ul>
2. Did End User contact NLSP?	<ul style="list-style-type: none"> <li>• The End User contacts either the NLSP or OLSP to cancel the porting request. Only the NLSP or OLSP can initiate this transaction, not another SP.</li> <li>• The OLSP is not required to cancel the porting request and may choose to advise the End User to contact the NLSP to initiate the cancel. If the NLSP is contacted by the authorized End User to initiate the cancel, the NLSP must do so.</li> <li>• The contacted SP gathers information necessary for sending the supplemental request to the other SP noting cancellation, and for sending the cancellation request to NPAC.</li> <li>• If Yes, go to Step 3.</li> <li>• If No, go to Step 7.</li> </ul>
3. Is NLSP a Reseller or Class 2 or 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 4.</li> <li>• If No, go to Step 5.</li> </ul>
4. NLSP sends cancel request to NNSP	<ul style="list-style-type: none"> <li>• The NLSP notifies the NNSP, via their inter-company interface, indicating that the porting request is to be canceled.</li> </ul>
5. NNSP sends SUPP to ONSP noting cancellation as soon as possible and prior to activation	<ul style="list-style-type: none"> <li>• The NNSP fills out and sends the supplemental request form to the ONSP via their inter-company interface, indicating cancellation of the porting request.</li> </ul>

## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
6. NNSP sends cancel request to the NPAC	<ul style="list-style-type: none"> <li>The NNSP notifies the NPAC, via the SOA interface, indicating the porting request is to be canceled.</li> </ul>
7. OLSP obtains End User authorization	<ul style="list-style-type: none"> <li>If the OLSP is moving ahead to cancel the port request, the OLSP obtains verifiable authority (e.g., Letter of Authorization – [LOA], third-party verification – [TPV], etc.) from the End User to act as the official agent on behalf of the End User. The NLSP cannot require a physical copy of the End User authorization to be provided before processing the cancellation request. The OLSP is responsible for demonstrating verifiable authority in the case of a dispute. The verifiable authority obtained by the OLSP must have occurred and be dated on or after the date that the original authority was obtained from the End User by the NLSP that initiated the original porting request.</li> </ul>
8. Is OLSP a Reseller or Class 2 or 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"> <li>If Yes, go to Step 9.</li> <li>If No, go to Step 10.</li> </ul>
9. OLSP sends cancel request to ONSP	<ul style="list-style-type: none"> <li>The OLSP notifies the ONSP, via their inter-company interface, indicating that the porting request is to be canceled.</li> </ul>
10. ONSP sends cancel request to NPAC	<ul style="list-style-type: none"> <li>The OLSP, contacted directly by the End User or notified by the NNSP via their inter-company interface, sends a cancellation message to the ONSP, via their inter-company interface.</li> <li>The ONSP notifies the NPAC, via the SOA interface, indicating the porting request is to be canceled.</li> <li>The ONSP takes appropriate action related to internal work orders.</li> </ul>
11. ONSP notifies NNSP of cancellation	<ul style="list-style-type: none"> <li>A wireline ONSP sends the NNSP (wireline or wireless) a jeopardy notice as defined by the Ordering and Billing Forum (OBF) or an e-mail notification, indicating the End User's request for cancellation using the process outlined in Best Practice #63 (See <a href="http://www.npac.com/lnpa-working-group/lnp-best-practices#0063">http://www.npac.com/lnpa-working-group/lnp-best-practices#0063</a>.)</li> <li>A wireless ONSP's notification to the NNSP (wireless or wireline) indicating the End User's request for cancellation is via the NPAC notification to the NNSP's SOA resulting from the cancel request in Step 10. (Wireless carriers do not have the ability to send Jeopardy notifications.) This cancellation message is accepted by the NPAC only if the ONSP had previously concurred with the port by sending an SV Create message to NPAC during the SV creation. If the ONSP does not send a create message to the NPAC for this SV, it cannot subsequently send a cancellation message. In either case, the wireless ONSP must follow up with a telephone call and/or e-mail notification to the NNSP notifying them of the End User's request for cancellation.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
12. Did the provider requesting cancel send a Create message to NPAC?	<ul style="list-style-type: none"> <li>• This is the entry point from the Inter-Service Provider LNP Operations Flows – Conflict Flow For The Service Creation Provisioning Process, tie point C, Figure 11.</li> <li>• This cancellation message is accepted by the NPAC only if the ONSP had previously created during the SV creation. If the ONSP does not send a create message to the NPAC for this SV, it cannot subsequently send a cancellation message.</li> <li>• If Yes, go to Step 14.</li> <li>• If No, go to Step 13.</li> </ul>
13. NPAC rejects the cancel request	<ul style="list-style-type: none"> <li>• NPAC sends an error via the SOA interface indicating that a cancel request cannot be sent for an SV that did not have a matching create from that SP.</li> </ul>
14. Did both NNSP and ONSP send Create message to NPAC?	<ul style="list-style-type: none"> <li>• The NPAC tests for receipt of cancellation messages from the two SPs based on which SP had previously sent a message into the NPAC. Since the ONSP create is optional for SV creation, if the ONSP did not send a message during the creation process, the ONSP input during cancellation is not accepted by the NPAC. Similarly, if during the SV creation process only the ONSP sent a message, and not the NNSP, only the ONSP input is accepted when canceling an order.</li> <li>• If Yes, go to Step 16.</li> <li>• If No, go to Step 15.</li> </ul>
15. <b>Notify Provider</b> – NPAC updates subscription to cancel, logs status change, and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>• For the Notification process, refer to Inter-Service Provider LNP Operations Flows –Reseller/Class 2 or 3 Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>• For a “non-concurred” SV, when the first cancellation message is received, the NPAC sets the SV status directly to <i>cancel</i>, and proceeds to tie point Z. Both NNSP and ONSP are notified of this change in status via the SOA interface.</li> </ul>
16. <b>Notify Provider</b> – NPAC updates subscription to cancel-pending, logs status change, and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>• For the Notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Class 2 or 3 Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>• For a “concurrent” SV, when the first cancellation message is received, the NPAC sets the SV status to <i>cancel-pending</i>. Both NNSP and ONSP are notified of this change in status via the SOA interface.</li> </ul>
17. Did NNSP send cancel to NPAC?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 18.</li> <li>• If No, go to Step 22.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

<b>Flow Step</b>	<b>Description</b>
18. Did NPAC receive cancel ACK from ONSP within first cancel window timer?	<ul style="list-style-type: none"> <li>• The NPAC applies a nine (9)-business hour [tunable parameter] time limit on receiving cancellation acknowledgment messages from both SPs. This is referred to as the Cancellation-Initial Concurrence Window. The ACK is optional for the SP that initiated the cancel request.</li> <li>• Short business hours are defined as 7a-7p CT (Business Day start at 13:00/12:00 GMT, duration of 12 hours).</li> <li>• Medium business hours (for wireline-involved Simple porting) are defined as 7a-12a Monday through Friday, excluding NPAC-defined Holidays in the predominant time zone for each NPAC region (Business Day start at NE/MA/SE [eastern time zone] 12:00/11:00 GMT, MW/SW/Canadian [central time zone] 13:00/12:00 GMT, WE [mountain time zone] 14:00/13:00 GMT, WC [west coast time zone] 15:00/14:00 GMT, duration of 17 hours).</li> <li>• Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (Business Day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours).</li> <li>• Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region.</li> <li>• If Yes, go to Step 21.</li> <li>• If No, go to Step 19.</li> </ul>
19. NPAC notifies ONSP that cancel ACK is missing	<ul style="list-style-type: none"> <li>• The Cancellation-Initial Concurrence Window starts with receipt of the first cancellation message at NPAC. When this timer expires, the NPAC requests the missing information from ONSP via the SOA interface. Only “concurrent” subscriptions reach this point in the process flow.</li> </ul>

## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
20. NPAC waits for either cancel ACK from ONSP or expiration of second cancel window timer	<ul style="list-style-type: none"> <li>• The NPAC applies an additional nine (9) business hour [tunable parameter] time limit on receiving cancellation acknowledgment messages from both Service Providers. This is referred to as the Cancellation-Final Concurrence Window. The ACK is optional for the SP that initiated the cancel request.</li> <li>• Short business hours are defined as 7a-7p CST (Business Day start at 13:00 GMT, duration of 12 hours).</li> <li>• Medium business hours (for wireline-involved Simple porting) are defined as 7a-12a Monday through Friday, excluding NPAC-defined Holidays in the predominant time zone for each NPAC region (Business Day start at NE/MA/SE [eastern time zone] 12:00/11:00 GMT, MW/SW/Canadian [central time zone] 13:00/12:00 GMT, WE [mountain time zone] 14:00/13:00 GMT, WC [west coast time zone] 15:00/14:00 GMT, duration of 17 hours).</li> <li>• Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (Business Day start – NE/MA/SE 8a-8p CST, MW/SW 9a-9p CST, WE 10a-10p CST, WC 11a-11p CST, duration of 12 hours).</li> <li>• Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region.</li> <li>• Either upon receipt of the concurring ACK notification or the expiration of the second cancel window timer, go to Step 21.</li> </ul>
21. <b>Notify Provider</b> – NPAC updates subscription to cancel, logs cancel and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>• For the notification process, refer to Inter-Service Provider LNP Operations Flows –Reseller/Class 2 or 3 Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>• The porting request is canceled by changing the subscription status to <i>canceled</i>. Both Service Providers are notified of the cancellation via the SOA interface.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
22. Did NPAC receive cancel ACK from NNSP within first cancel window timer?	<ul style="list-style-type: none"> <li>• The NPAC applies a nine (9)-business hour [tunable parameter] time limit on receiving cancellation acknowledgment messages from both SPs. This is referred to as the Cancellation-Initial Concurrence Window. The ACK is optional for the SP that initiated the cancel request.</li> <li>• Short business hours are defined as 7a-7p CT (Business Day start at 13:00/12:00 GMT, duration of 12 hours).</li> <li>• Medium business hours (for wireline-involved Simple porting) are defined as 7a-12a Monday through Friday, excluding NPAC-defined Holidays in the predominant time zone for each NPAC region (Business Day start at NE/MA/SE [eastern time zone] 12:00/11:00 GMT, MW/SW/Canadian [central time zone] 13:00/12:00 GMT, WE [mountain time zone] 14:00/13:00 GMT, WC [west coast time zone] 15:00/14:00 GMT, duration of 17 hours).</li> <li>• Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (Business Day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours).</li> <li>• Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region.</li> <li>• If Yes, go to Step 21.</li> <li>• If No, go to Step 23.</li> </ul>
23. NPAC notifies NNSP that cancel ACK is missing	<ul style="list-style-type: none"> <li>• The Cancellation-Initial Concurrence Window starts with receipt of the first cancellation message at NPAC. When this timer expires, the NPAC requests the missing information from NNSP via the SOA interface. Only “concurrent” subscriptions reach this point in the process flow.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
24. Did NPAC receive cancel ACK from NNSP within second cancel window timer?	<ul style="list-style-type: none"> <li>• The NPAC applies an additional nine (9)-business hour [tunable parameter] time limit on receiving cancellation acknowledgment messages from both SPs. This is referred to as the Cancellation-Final Concurrence Window. The ACK is optional for the SP that initiated the cancel request.</li> <li>• Short business hours are defined as 7a-7p CT (Business Day start at 13:00/12:00 GMT, duration of 12 hours).</li> <li>• Medium business hours (for wireline-involved Simple porting) are defined as 7a-12a Monday through Friday, excluding NPAC-defined Holidays in the predominant time zone for each NPAC region (Business Day start at NE/MA/SE [eastern time zone] 12:00/11:00 GMT, MW/SW/Canadian [central time zone] 13:00/12:00 GMT, WE [mountain time zone] 14:00/13:00 GMT, WC [west coast time zone] 15:00/14:00 GMT, duration of 17 hours).</li> <li>• Long business hours are planned for 9a-9p in the predominant time zone for each NPAC region (Business Day start – NE/MA/SE 14:00/13:00 GMT, MW/SW/Canadian 15:00/14:00 GMT, WE 16:00/15:00 GMT, WC 17:00/16:00 GMT, duration of 12 hours).</li> <li>• Short Business Days are currently defined as Monday through Friday, except holidays, and Long Business Days are currently defined as Sunday through Saturday (seven days a week), except holidays. Holidays and business hours are defined for each NPAC Region.</li> <li>• If Yes, go to Step 21.</li> <li>• If No notification is received prior to second cancel window timer expiration, proceed to tie-point CC, "Cancellation Ack Missing from New Provider Provisioning Process", Figure 13.</li> </ul>
Z. End	<ul style="list-style-type: none"> <li>• Return to Main Porting Flow, tie point Z, Figure 6.</li> </ul>

Cancellation Ack Missing from New Provider Provisioning Process

Figure 13

Flow Step	Description
<b>Note that the Cancellation Conflict process flow is reached only for “concurrent” subscriptions.</b>	
1. <b>Notify Provider</b> – NPAC updates subscription to conflict, logs conflict, and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>This is the entry point from the Inter-Service Provider LNP Operations Flows – Cancellation Flow For Provisioning Process, tie point CC, Figure 12.</li> <li>If the NNSP does not provide a cancellation notification message to NPAC, in spite of a Cancellation LSR from the ONSP and a reminder message from NPAC, the subscription is placed in a <i>conflict</i> state. NPAC also writes the proper conflict cause code to the subscription record, and notifies both SPs, with proper conflict cause code, of the change in status via the SOA interface.</li> <li>For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>Both SPs take appropriate action related to internal work orders.</li> </ul>
2. Did NPAC receive cancel message from NNSP?	<ul style="list-style-type: none"> <li>Only “missing cancellation ACK from New SP” subscriptions reach this point in the process flow. The subscription will transition to pending or cancel.</li> <li>With the subscription in <i>conflict</i>, it is only the NNSP who controls the transaction. The NNSP makes a concerted effort to contact the ONSP prior to proceeding.</li> <li>If Yes, go to Step 3.</li> <li>If No, go to Step 5.</li> </ul>
3. NNSP notifies NPAC to cancel subscription	<ul style="list-style-type: none"> <li>The NNSP may decide to cancel the subscription. If so, they notify NPAC of this decision via the SOA interface.</li> </ul>
4. <b>Notify Provider</b> – NPAC updates subscription to cancel, logs cancel, and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>Following notification by the NNSP to cancel the subscription, NPAC logs this information, and changes the subscription status to <i>canceled</i>. Both SPs are notified of the change in the subscription status via the SOA interface.</li> <li>For the Notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>Both SPs take appropriate action related to internal work orders.</li> <li>Return to Main Porting Flow, tie point Z, Figure 6.</li> </ul>
5. Has conflict expiration window expired?	<ul style="list-style-type: none"> <li>At this point in the process flow, the subscription status is <i>conflict</i>, and is awaiting conflict resolution or the expiration of the tunable window (Conflict Expiration Window, current value of 30 days).</li> <li>If Yes, go to Step 6.</li> <li>If No, go to Step 7.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

Flow Step	Description
6. <b>Notify Provider</b> – NPAC updates subscription to cancel, logs cancel, and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>• After no response from the NNSP for 30 calendar days regarding this particular subscription, NPAC changes the status to <i>canceled</i> and notifies both SPs of the change in status via the SOA interface.</li> <li>• For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>• Both SPs take appropriate action related to internal work orders.</li> <li>• Return to Main Porting Flow, tie point Z, Figure 6.</li> </ul>
7. Did NPAC receive resolve conflict message from NNSP	<ul style="list-style-type: none"> <li>• The NNSP may choose to proceed with the porting process, in spite of a cancellation message from the ONSP. As both SPs are presumably basing their actions on the End User's request, and each is apparently getting a different request from that End User, each should ensure the accuracy of the request.</li> <li>• If the NNSP decides to proceed with the porting, they send a resolved conflict message via the SOA interface.</li> <li>• It is the responsibility of the NNSP to contact the ONSP, to request that related work orders which support the porting process are performed. The ONSP must support the porting process.</li> <li>• If Yes, go to Step 8.</li> <li>• If No, return to Step 2.</li> </ul>
8. Has NNSP conflict resolution restriction expired?	<ul style="list-style-type: none"> <li>• At this point in the process flow, the subscription status is <i>conflict</i>, and is awaiting conflict resolution or the expiration of the tunable window (current values of six hours for wireline-involved Non-Simple Ports [Long Conflict Resolution New Service Provider Restriction], two hours for wireline-involved Simple Ports [Medium Conflict Resolution New Service Provider Restriction], and six hours for wireless [Short Conflict Resolution New Service Provider Restriction]).</li> <li>• The conflict resolution restriction window is only applicable the first time a subscription is placed into conflict, whether the conflict is invoked by the NPAC due to this process, or placed into conflict by the ONSP.</li> <li>• If Yes, go to Step 9.</li> <li>• If No, go to Step 10.</li> </ul>
9. <b>Notify Provider</b> – NPAC notifies NNSP and ONSP of 'conflict off' via SOA	<ul style="list-style-type: none"> <li>• For the Notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>• NPAC notifies both SPs of the change in subscription status. The porting process resumes as normal, at tie-point BB, Figure 6.</li> </ul>
10. NPAC rejects the resolve conflict request from NNSP	<ul style="list-style-type: none"> <li>• The NNSP has sent the resolve conflict message before the expiration of the conflict resolution restriction window. NPAC returns an error message back via the SOA interface.</li> <li>• Return to Step 2.</li> </ul>



## Inter-Service Provider LNP Operations Flows – Narratives

### Disconnect Process for Ported Telephone Numbers

Figure 14

Flow Step	Description
1. End User initiates disconnect	<ul style="list-style-type: none"> <li>The End User provides disconnect date and negotiates intercept treatment with current SP.</li> </ul>
2. Is NLSP a Reseller or Class 2 or 3 Interconnected VoIP Provider?	<ul style="list-style-type: none"> <li>If Yes, go to Step 3.</li> <li>If No, go to Step 4.</li> </ul>
3. NLSP sends disconnect request to NNSP	<ul style="list-style-type: none"> <li>Current Local SP sends disconnect request to current Network SP, per inter-company processes.</li> </ul>
4. NNSP initiates disconnect	<ul style="list-style-type: none"> <li>NNSP initiates disconnect of service based on request from NLSP or End User.</li> <li>NNSP initiates disconnect of service based on regulatory authority(s).</li> </ul>
5. NNSP arranges intercept treatment when applicable	<ul style="list-style-type: none"> <li>NNSP arranges intercept treatment as negotiated with the End User, or, when the disconnect is SP initiated, per internal processes.</li> </ul>
6. NNSP creates and processes service order	<ul style="list-style-type: none"> <li>NNSP follows existing internal process flows to ensure the disconnect within its own systems.</li> </ul>
7. NNSP notifies NPAC of disconnect date <sup>1</sup> and indicates effective release date <sup>2</sup>	<ul style="list-style-type: none"> <li>NNSP notifies NPAC of disconnect date via the SOA interface and indicates effective release date, which defines when the broadcast occurs.</li> <li>If no effective release date is given, the broadcast from the NPAC is immediate.</li> </ul>
8. Has effective release date been reached?	<ul style="list-style-type: none"> <li>If Yes, go to Step 9.</li> <li>If No, repeat Step 8.</li> </ul>
9. NPAC broadcasts subscription deletion to all applicable providers	<ul style="list-style-type: none"> <li>On effective release date, the NPAC broadcasts SV deletion to all applicable SPs via the LSMS interface.</li> </ul>
10. <b>Notify Provider</b> – NPAC notifies code/block holder of disconnected TN(s), disconnect and release dates	<ul style="list-style-type: none"> <li>On effective release date, the NPAC notifies code/block holder of the disconnected TN(s), effective release and disconnect dates via the SOA interface. Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> </ul>

<sup>1</sup> Disconnect Date: Date the telephone number or numbers are no longer associated between an End User and the current Service Provider.

<sup>2</sup> Effective Release Date: Date the telephone number reverts back to NPA/NXX holder/owner.

## Inter-Service Provider LNP Operations Flows – Narratives

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<b>Flow Step</b>	<b>Description</b>
11. NPAC deletes TN(s) from active database	<ul style="list-style-type: none"><li>• On effective release date, the NPAC removes telephone number from NPAC database.</li></ul>
12. End	

<sup>1</sup> Disconnect Date: Date the telephone number or numbers are no longer associated between an End User and the current Service Provider.

<sup>2</sup> Effective Release Date: Date the telephone number reverts back to NPA/NXX holder/owner.



Audit Process

Figure 15

Flow Step	Description
1. Service Provider requests an audit from NPAC	<ul style="list-style-type: none"> <li>An SP may request an audit to assist in resolution of a repair problem reported by an End User. Prior to the audit request, the SP completes internal analysis as defined by company procedures and, if another SP is involved, attempts to jointly resolve the trouble in accordance with inter-company agreements between the involved service providers. Failing to resolve the trouble following these activities, the SP requests an audit.</li> </ul>
2. NPAC issues queries to appropriate LSMSs	<ul style="list-style-type: none"> <li>The NPAC issues queries to the LSMSs involved in the customer port.</li> </ul>
3. NPAC compares own subscription version to LSMS subscription version	<ul style="list-style-type: none"> <li>Upon receipt of the LSMS subscription version, the comparison of the NPAC and LSMS subscription versions is made to determine if there are discrepancies between the two databases.</li> <li>If an LSMS does not respond, it is excluded from the audit.</li> </ul>
4. NPAC downloads updates to LSMSs with subscription version differences	<ul style="list-style-type: none"> <li>If inaccurate routing data is found, the NPAC broadcasts the correct subscription version data to any involved SPs networks to correct inaccuracies.</li> </ul>
5. Are all audits completed?	<ul style="list-style-type: none"> <li>If Yes, go to Step 6.</li> <li>If No, return to Step 4.</li> </ul>
6. <b>Notify Provider</b> – NPAC reports audit completion and discrepancies to requestor	<ul style="list-style-type: none"> <li>The NPAC reports to the requesting SP following completion of the audit to allow the SP to close the trouble ticket.</li> <li>Upon request, the NPAC provides ad hoc reports to SPs that wish to determine which SPs are launching audit queries to their LSMS. Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> </ul>
7. End	

Code Opening Process

Figure 16

<b>Flow Step</b>	<b>Description</b>
1. NPA-NXX holder notifies NPAC of NPA-NXX Code(s) being opened for porting	<ul style="list-style-type: none"><li>• The SP responsible for the NPA-NXX being opened must notify the NPAC via the SOA or LSMS interface within a regionally agreed upon time frame.</li><li>• In the case of numbers that use a Type 1 wireless interconnection, the corresponding NPA-NXX needs to be opened by the Old Wireline SP.</li></ul>
2. NPAC updates its NPA-NXX database	<ul style="list-style-type: none"><li>• The NPAC updates its databases to indicate that the NPA-NXX has been opened for porting.</li></ul>
3. NPAC sends notice of code opening to all Service Providers	<ul style="list-style-type: none"><li>• The NPAC provides advance notice via the object creation message of the scheduled opening of NPA-NXX code(s) via the SOA and LSMS interface. Currently the NPAC vendor is also posting the NPA-NXX openings to the secure website.</li></ul>
4. End	



First TN Ported in NPA-NXX

Figure 17

Flow Step	Description
1. NPAC successfully processes create request for TN subscription version	<ul style="list-style-type: none"> <li>• SP notifies the NPAC of SV creation for a TN in an NPA-NXX.</li> </ul>
2. NPAC successfully processes create request for NPA-NXX-X	<ul style="list-style-type: none"> <li>• NPAC successfully processes an NPA-NXX-X for a Number Pool Block.</li> </ul>
3. First Subscription Version activity in NPA-NXX?	<ul style="list-style-type: none"> <li>• If Yes, go to Step 4.</li> <li>• If No, go to Step 5.</li> </ul>
4. <b>Notify Provider</b> – NPAC sends notification of first TN ported to all providers via SOA and LSMS	<ul style="list-style-type: none"> <li>• When the NPAC receives the first SV create request in an NPA-NXX, it will broadcast a “heads-up” notification to all SPs via the SOA and LSMS interfaces. Upon receipt of the NPAC message, all SPs will complete the opening for the NPA-NXX code for porting in all switches.</li> <li>• Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> </ul>
5. End	

Cancel-Undo Process

Figure 18

Flow Step	Description
1. Provider requests a cancel-undo	<ul style="list-style-type: none"> <li>The Cancel-Pending Undo Process may begin with a Service Provider requesting the reversal (undo) of an in-progress cancel for their cancel-pending port.</li> </ul>
2. Is the subscription in cancel-pending status?	<ul style="list-style-type: none"> <li>If Yes, go to Step 4.</li> <li>If No, go to Step 3.</li> </ul>
3. NPAC rejects the cancel-undo request	<ul style="list-style-type: none"> <li>NPAC sends an error to the requesting SP indicating the current SV status is not valid for a cancel-undo request.</li> <li>Go to Step 6.</li> </ul>
4. Did the provider requesting a cancel-undo issue a cancel for this subscription?	<ul style="list-style-type: none"> <li>If Yes, go to Step 5.</li> <li>If No, repeat Step 3.</li> </ul>
5. <b>Notify Provider</b> – NPAC updates subscription to status prior to cancel and notifies NNSP and ONSP	<ul style="list-style-type: none"> <li>Upon cancel-undo, NPAC logs this information, and changes the subscription status to the status prior to the cancel (either <i>pending</i> or <i>conflict</i>). Both SPs are notified of the change in the subscription status via the SOA interface.</li> <li>For the notification process, refer to Inter-Service Provider LNP Operations Flows – Reseller/Interconnected VoIP Provider/Type 1 Notification, Figure 8.</li> <li>Both SPs take appropriate action related to internal work orders.</li> </ul>
6. End	



## Inter-Service Provider LNP Operations Flows – Narratives

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<b>Tunable Name</b>	<b>Current Tunable Value</b>
T1, Short Initial Concurrence Window	1 hour
T1, Medium Initial Concurrence Window	3 hours
T1, Long Initial Concurrence Window	9 hours
T2, Short Final Concurrence Window	1 hour
T2, Medium Final Concurrence Window	3 hours
T2, Long Final Concurrence Window	9 hours
Conflict Restriction Window	12:00pm (Noon)
Simple Port Conflict Restriction Window	21:00
Conflict Expiration Window	30 days
Long Conflict Resolution New Service Provider Restriction	6 hours
Medium Conflict Resolution New Service Provider Restriction	2 hours
Short Conflict Resolution New Service Provider Restriction	6 hours
Long Cancellation-Initial Concurrence Window	9 hours
Medium Cancellation-Initial Concurrence Window	9 hours
Short Cancellation-Initial Concurrence Window	9 hours
Long Cancellation-Final Concurrence Window	9 hours
Medium Cancellation-Final Concurrence Window	9 hours
Short Cancellation-Final Concurrence Window	9 hours
Short Business Day Start	07:00 CT
Short Business Day Duration	12 hours
Medium Business Day Start	07:00 predominate TZ
Medium Business Day Duration	17 hours
Long Business Day Start	09:00 predominate TZ
Long Business Day Duration	12 hours

## **The All Services Overlay is the Best Solution for the Area Code**

The LNPA WG supports the all-services overlay for Area Code Relief. This approach minimizes inconvenience to consumers and supports the continuing trend in the United States to utilize overlays as the preferred form of area code relief.

### **AREA CODE OVERLAY**

The application of Area Code Relief methods has continued to evolve since the late 1990's. Overwhelmingly, the preferred method of relief chosen is now the All- Services Area Code (NPA) Overlay. In fact, only one Area Code Split has been implemented in the last 5 years, compared to over 25 Overlays. NPA Overlays have both practical and technical positive implications for customers and service providers alike.

### **Benefits of All-Services Overlay**

1. All current customers retain their existing area code and telephone number; no winners or losers.
2. No discrimination against customers on different sides of a boundary line, as does a geographic split when determining which side gets the new area code.
3. Less customer confusion and easier education process.
4. Minimized financial impact on business customers since there is no need to change signage, advertising, websites, checks and stationery (unless they currently show 7-digit numbers rather than 10-digit numbers).
5. Residential customers are not forced to update personal printed material such as checks or make changes to websites storing telephone numbers (e.g., banking, insurance, credit cards), unless they currently show only 7-digit numbers.
6. Does not split cities or counties into different area codes, keeping communities of interest intact.
7. No impact on some wireless customers that would otherwise require their handsets to be manually reprogrammed.
8. No technical impacts to text messaging, multi-media messaging or smart phone applications.
9. Provides the most efficient distribution of numbering resources by allowing assignments to follow demand, not withstanding forecasts for growth.
10. Minimizes call routing issues, especially with ported numbers.
11. No need for synchronization of old and new area codes in NPAC databases.
12. No technical impacts to number portability or toll-free number routing.
13. Missing and exploited children continue to be able to contact parents since their parents' area code and telephone number would remain the same.
14. Deployed Military personnel continue to have service since their area code and telephone number would not change.
15. No Caller ID confusion.



## **The All-Services Overlay is the Best Solution for the Area Code**

### **Summary**

In addition to the benefits above, an overlay is the superior option for area code relief for the following reasons:

- Most Equitable Approach – Treats all consumers the same
- Least disruptive for the consumer
- Easily implementable, as demonstrated by the large number of successful U.S. implementations since 2007
- Most consumers already comfortable with 10-digit dialing
- Avoids Local Number Portability (LNP) database problems associated with a split (e.g., updates to operational support systems with old and new area codes so port requests complete within the designated porting intervals)
- Facilitates future area code relief efforts

**Mary Retka/Rosemary Emmer**  
**NANC Deliverable**

**Sept 18, 2013 Version 2 (updates made from Sept 2013 NANC meeting)**

To go through the presentation that Henning Schulzrinne made at the 2/21/13 NANC meeting to consider any items the NANC could provide guidance on – this list was developed from page #4 of his presentation.

**For the items under the title "Recommendation":**

Item	Proposed Work Group
LNP and ENUM Integration	<i>Work is underway at the NPAC on this issue – LNPA WG could work future items</i>
Toll Free Services	<i>This could be worked at the ATIS SNAC forum</i>
Future identifiers in support of industry trends beyond the e.164 numbering plan	<i>This could be worked at the FoN group and would fit with some of the items already on their list of potential efforts</i>

**For items under the title "Near Term" (FYI – the timeframe for "near term" was not defined):**

Item	Proposed Work Group
ENUM model	<i>This could be worked at the LNPA-WG</i>
Toll Free, identify issues related to current dependence on LATA-based routing and called party based charging	<i>We don't feel this is a numbering issue per say – but we suggest this may fit in the ATIS SNAC forum</i>
Consider identifiers outside e.164 numbering plan	<i>This could be worked at the FoN group and would fit with some of the items already on their list of potential efforts</i>
Determine M2M impact (if any) for identifiers	<i>The FoN already has an M2M issue, so this could go to the FoN group</i>
Create International Database Strategy Team	<i>This would be outside of the scope of the NANC groups, and perhaps could be worked in an international forum like one of the ITU-T study group.</i>



**For the items under the title "Longer Term" (again the timeframe was not defined):**

Item	Proposed Work Group
Set schedule for nationwide 10 digit dialing	<i>This requires that the regulatory bodies (the FCC and the State regulators) address this change</i>
Align LATAs and rate centers elimination with "Bill and Keep" implementation date	<i>This would also require that the FCC address this change</i>
Implement non-geographic number portability which becomes possible with elimination of LD specific charges to consumers	<i>This could be worked at the LNPA-WG</i>
Security, anti-spoofing, Privacy (Identity)	<i>This is longer term work which could align with work under ATIS</i>
Use of location data	<i>This is longer term work which could align with work under ATIS</i>
Role of IPv6 and DNS in emerging identifiers	<i>This is longer term work which could align with work under ATIS</i>